



# RESEARCH POLICY BRIEF

Travelling together: improving access of people with disability to road infrastructure in PNG

# Roads: necessary but dangerous

People with disability are often amongst the poorest and most vulnerable members of any community and it is particularly important that development efforts reach them. This includes roads and transportation infrastructure which has the potential to improve access to essential services, social networks and economic opportunities.

Roads and road infrastructure in Papua New Guinea (PNG) are often largely inaccessible to people with disability, including those with physical, mobility, hearing and vision impairments. This is despite the fact that people with disability make up approximately 15 per cent of the population. Roads are also dangerous. The World Health Organization *Global Burden of Disease* project found that

#### **KEY MESSAGES**

- Physical and other barriers severely limit the ability of people with disability to use roads, and increase risks. Road traffic accidents are a growing cause of death and disability in PNG.
- Key barriers include lack of marked crossings, signage, marked bus stops; open drains; poorly maintained, narrow or absent footpaths along roads and bridges; and potholed or flooded roads.
- The lack of basic features impacts upon all road users, however the consequences for people with disability are often more acute.
- Addressing barriers during road design and construction would be simple and low-cost. Other measures would save road maintenance costs in the long term.
- International donors need to ensure that road infrastructure projects should explicitly involve and consider the needs of people with disability, and incorporate basic accessibility standards to benefit all road users.

road traffic accidents are the second most common cause of death and disability in developing countries. Such accidents are a growing cause of death and disability in PNG. Yet they are also among the most easily preventable health risks. It is therefore important to ensure that roads are safe for all road users.

### Implications of accessibility barriers

The primary means of transportation in PNG is walking, and people with disability typically use roads either as pedestrians or on local buses. However in PNG, roads are commonly designed around vehicle traffic rather than pedestrians, and lack basic features such as crossings, speed signs and footpaths. This impacts on all road users, yet the consequences for people with disability are often more acute.

For some people with disability, the lack of accessibility is so severe that it prevents them from using roads, as they are simply not navigable. Others avoid busy roads or travel only at certain times of the day, or when others can accompany them. This limits their access to basic services such as education, health care and livelihood opportunities. It can also exacerbate isolation and stigma faced by people with disability.

A major implication of poor accessibility is that the poverty reduction impacts of road construction and improvement projects may fail to reach people with disability. Worse still, such projects may actually further harm the ability of people with disability to access basic services due to increases in vehicle traffic travelling at high speeds.

#### Key access issues

Poorly accessible road infrastructure puts people with disability in danger of being hit by vehicles, particularly if they are pedestrians. People with mobility impairments may not be able to safely traverse fast-moving traffic to cross roads. Bridges and roads without footpaths or with inaccessible footpaths can force wheelchair users and others to travel on the road. People with vision and/or

hearing impairments can find it difficult to cross and navigate roads. Those with intellectual impairments may find it confusing or difficult to negotiate busy traffic. The most common barriers to people with disability using road infrastructure include:

- Absent or narrow, badly maintained or obstructed footpaths, forcing pedestrians to travel on roads.
- A lack of marked crossings at logical crossing sites combined with high traffic speeds and few speed reduction signs.
- Narrow bridges with limited pedestrian space or poor access to footpaths.
- Poor road drainage and maintenance, including open drains along roads and large potholes in roads.
- A lack of marked bus stops, seats or shelters, as well as inaccessible buses and no signs showing destinations.

Additionally, there is little awareness by drivers of vehicles that people with disability use roads, so they are unlikely to consider their needs.

# There is a lack of awareness of access issues for people with disability

Despite the impacts on people with disability, road decision-makers do not seem to have a good understanding of these issues.

Interviewed road decision-makers (including engineers and works managers in government agencies) largely did not consider people with disability as road users, and had little knowledge about the particular needs that people with disability might have. People with disability have also rarely been involved in consultation processes around road design and construction, meaning there is no way for their specific needs to be identified or integrated into road infrastructure. This is partly symptomatic of lack of community consultation more broadly, but also because people with disability are often ignored or isolated within communities and cannot access consultation processes.

Road decision-makers also lacked data or information about accidents, meaning that the specific safety concerns of people with disability were not integrated into road improvement processes.

#### **Opportunities for change**

While access to road infrastructure by people with disability is currently limited there are many opportunities for road decision-makers, donors and others to address this issue.

 Although road decision-makers have limited specific knowledge about how people with disability use roads, decision-makers involved in this research project who learned more about this were receptive to including the needs of people with disability in future planning, and recognised this as a gap in current planning and

- implementation processes.
- Features such as speed signs, marked crossings, bus stops, covered drains that would improve road access for people with disability are often cheap and simple to incorporate into road projects. Others, such as improved drainage, would reduce ongoing maintenance costs.
- Cheap and replicable tools for consulting with people with disability on road usage have been trialled in PNG and protocols have been developed. These include focus groups, 'moveabouts' or access audits of sections of the road, and photo elicitation and poster-making about key aspects of the road that were liked or disliked. These lessons could be applied to road construction in other contexts.

## Policy and program recommendations

- Create awareness of road safety and disability issues: Government road decision-makers, managing contractors and other agencies involved in road construction and maintenance need to explicitly involve and consider the needs of people with disability when constructing and maintaining roads.
- Develop mandatory guidelines for consultation and road access: Donors that fund road infrastructure or road safety projects should make consultation with people with disability and incorporation of basic access standards a requirement of funding. Project budgets should be sufficient to cover these measures. Documents such as the AusAID Accessibility Design Guide, and national legislation can provide specific guidance on improving access.
- Evaluate impact: Road safety and other impacts on people with disability and other vulnerable road users need to be specifically considered in evaluation.
- Build capacity and awareness: Government road agencies, donors and managing contractors should build staff awareness of the needs of people with disability as road users and of appropriate consultation methods. Opportunities to involve disabled people's organizations and people with disability as trainers should be prioritized.

#### **Further reading**

The 'Travelling Together' project was funded by an AusAID Development Research Award. The project involved data collection with 48 people with disability and nine road decision-makers from rural and urban locations in PNG. The full literature review, findings report and information sheet can be found on the project website (below).

AusAID's *Accessibility Design Guide*, available online, provides guidance on enabling people with disability to participate equally in social and economic life through the design and implementation of development initiatives.

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